

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

May 12, 2003

Joseph Brennan Courier Kendallville, Inc. 2500 Marion Drive Kendallville, IN 46755

> Re: 113-16834-00021 First Minor Revision to FESOP 113-12093-00021

Dear Mr. Brennan:

Courier Kendallville, Inc. was issued a FESOP permit on October 13, 2000 for a commercial printing plant that manufactures adhesive bound and saddlewire bound books and performs the following processes: printing, drying, binding and finishing. A letter requesting changes to this permit was received on February 24, 2003. Pursuant to the provisions of 326 IAC 2-8-11.1 a minor permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changing the type of work that is currently being printed on the existing Hantscho Mark 16 heatset web offset lithographic printing press. The change consists of running four colors, heavy coverage work on the Mark 16 press which will result in both the amount of ink used per hour and the volatile organic compound (VOC) content of the inks to increase. Currently, only two colors, light coverage (text) work is run on this press. Based on the current utilization (two colors and light coverage), the Mark 16 has potential VOC emissions of less than 25 tons per year (tpy). The new workload will increase the potential VOC emissions to greater than 25 tons per year. The source will limit VOC emissions to less than 25 tons per year to avoid the requirements of 326 IAC 8-1-6.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

Page 2 of 2 First Minor Permit Revision 113-16834-00021

Courier Kendallville, Inc. Kendallville, Indiana Permit Reviewer: NH/EVP

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Nishat Hydari, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call 973-575-2555 (ext. 3216) or 1-800-451-6027 press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments NH/EVP

cc: File - Noble County U.S. EPA, Region V

Noble County Health Department

Northern Regional Office

Air Compliance Section Inspector - Doyle Houser

Compliance Data Section - Karen Nowak

Administrative and Development

Technical Support and Modeling - Michelle Boner



Indiana Department of Environmental Management

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR MANAGEMENT

Courier Kendallville, Inc. 2500 Marion Drive Kendallville, Indiana 46755

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F113-12093-00021	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: October 13, 2000 Expiration Date: October 13, 2005

First Administrative Amendment: 113-16645-00021, issued on November 4, 2002

First Minor Permit Revision No.: 1	13_16834_00021	Page Affected: 27, 36a	
THE WIND TOTAL TOTAL TOTAL	10 1000+ 00021	1 age 7 medica. 21, doa	4
Issued by:Original signed by Paul Paul Dubenetzky, Branch Chief Office of Air Management	Dubenetzky	Issuance Date: May 12, 2003	

Page 27 of 37 OP No. F113-12093-00021

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 16, with a maximum line speed of 1265 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 16 Upper Dryer and Hantscho Mark 16 Lower Dryer, each with a maximum heat input rate of 5.8 MMBtu/hr, exhausting to one (1) stack, identified as 6; and
- (b) One (1) heat set web offset lithographic printing press (consisting to four (4) printing units), identified as M850, with a maximum line speed of 1600 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M130 Upper Dryer and Harris M130 Lower Dryer, each with a maximum heat input rate of 4.0 MMBtu/hr, exhausting to one (1) stack, identified as Oxy 1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP Limit [326 IAC 2-8-4][326 IAC 8-1-6]

VOC emissions from the printing press M850 and printing press M130 (listed in Section D.2) shall be controlled by the regenerative thermal oxidizer, identified as Millenium, that maintains a minimum overall control efficiency of 95.0%. This limit will render the requirements of 326 IAC 2-7 not applicable.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

VOC input from the one (1) printing press, identified as Mark 16 shall be limited to less than 25 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6 not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for printing press M850 and its control device.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee shall perform VOC testing on the 2.29 MM Btu/hr thermal oxidizer, identified as Millenium, by a method approved by the Commissioner, to determine the minimum operating temperature that will achieve 95.0% overall efficiency for this oxidizer. In addition to these requirements and pursuant to 326 IAC 2-1.1-11, IDEM may require compliance testing at any time to assure compliance with all applicable requirements.

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the ink, coating, fountain solution and cleaning solvent manufacturers. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 VOC Emissions

The one (1) regenerative thermal oxidizer, identified as Millenium, shall be in operation at all times when the printing press (M850) is in operation.

Courier Kendallville, Inc. Kendallville, Indiana Permit Reviewer: NH/EVP

First Minor Permit Revision 113-16834-00021 Revised by NH/EVP

Page 36a of 37 OP No. F113-12093-00021

as Mark 16

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

		Loor Quarterly Repor	•
Source Name: Source Address: Mailing Address: FESOP Minor Permit Facility: Parameter: Limit:	250 250 Revision No.: 113 One VO	urier Kendallville, Inc. 00 Marion Drive, Kendallville, IN 00 Marion Drive, Kendallville, IN 0-16834-00021 0-(1) heat set web offset lithogra 0-(2) Usage 0-(3) C usage not to exceed 25 tons 0-(4) YEAR:	I 46755 aphic printing press, identified
	Column 1	Column 2	Column 1 + Column 2
Month	VOC Usage This Month	VOC Usage Previous 11 Months	VOC Usage 12 Month Total
Month 1			
Month 2			
Month 3			
9	No deviation occurred Deviation has been	·	
Title .	/ Position: ature:		

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name: Courier Kendallville, Inc.

Source Location: 2500 Marion Drive, Kendallville, IN 46755

County: Noble SIC Code: 2752

Operation Permit No.:113-12093-00021Operation Permit Issuance Date:October 13, 2000Minor Permit Revision No.:113-16834-00021

Permit Reviewer: NH/EVP

The Office of Air Quality (OAQ) has reviewed a revision application from Courier Kendallville, Inc. relating to the operation of a commercial printing plant that manufactures adhesive bound and saddlewire bound books and performs the following processes: printing, drying, binding and finishing.

History

On February 24, 2003, Courier Kendallville, Inc. submitted an application to the OAQ requesting to change the type of work that is currently being printed on the existing Hantscho Mark 16 heatset web offset lithographic printing press. The change consists of running four colors, heavy coverage work on the Mark 16 press which will result in both the amount of ink used per hour and the volatile organic compound (VOC) content of the inks to increase. Currently, only two colors, light coverage (text) work is run on this press. Based on the current utilization (two colors and light coverage), the Mark 16 has potential VOC emissions of less than 25 tons per year (tpy). The new workload will increase the potential VOC emissions to greater than 25 tons per year, which according to the permit, requires notice and approval prior to this change. Courier Kendallville, Inc. was issued FESOP 113-12093-00021, on October 13, 2000.

Existing Approvals

The source was issued a FESOP (F113-12093-00021) on October 13, 2000. The source has since received the following:

(a) First Administrative Amendment No.: 113-16645-00021, issued on November 4, 2002.

Recommendation

The staff recommends to the Commissioner that the Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 24, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, 2 pages).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	
PM-10	
SO ₂	
VOC	68.89
СО	
NO _x	

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Xylene	0.21
Ethyl Benzene	0.04
Cumene	0.21
Glycol Ether	0.42
TOTAL	0.89

Justification of Modification

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is greater than 25 tons per year. However, the source has requested to limit VOC emissions to less than 25 tons per year. Therefore, the FESOP source is being modified through a FESOP Minor Permit Revision. This modification is being performed pursuant to 326 IAC 2-8-11(d)(7) which states "Source requests an emission limit to avoid 326 IAC 8-1-6."

Limited Potential to Emit of Modification after Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

		Potential to Emit (tons/year)						
Process/facility	РМ	PM-10	SO ₂	VOC	СО	NO _x	Single HAP	HAPs
Mark 16				< 25			0.42	0.89
Total Emissions				< 25			0.42	0.89

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Limited Potential to Emit of Entire Source

		Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	СО	NO_X	Single HAP	Total HAPs
Mark 6	0.00	0.00	0.00	23.91	0.00	0.00	0.16	0.16
Mark 16	0.00	0.00	0.00	24.83 < 25 **	0.00	0.00	0.21	0.21 0.89
M130*	0.00	0.00	0.00	9.70	0.00	0.00	0.22	0.22
M850*	0.00	0.00	0.00	9.89	0.00	0.00	0.28	0.28
Heidelberg Sheetfed Press	0.00	0.00	0.00	15.14	0.00	0.00	3.49	7.19
Insignificant Activities (Natural Gas Combustion)	0.39	1.56	0.12	1.13	17.25	20.54	0.00	0.00
Total Emissions	0.39	1.56	0.12	84.60 84.77	17.25	20.54	3.49	8.06 8.74

^{*} Presses M130 and M850 will be controlled by the thermal oxidizer, Millenium.

The potential to emit VOC of this source (which includes existing and new emission units) is less than 100 tons per year. Therefore, this source will still maintain its FESOP status.

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone.

Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone.

^{**}Source will limit VOC emissions from Mark 16 to less than 25 tons per year to avoid the requirements of 326 IAC 8-1-6

Federal Rule Applicability

- (a) The one (1) printing press identified as Mark 16, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart QQ), because the one (1) printing press is not a publication rotogravure printing presses.
- (b) The one (1) printing press identified as Mark 16, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart KK because the one (1) printing press is not publication rotogravure, packaging rotogravure or wide-web flexographic printing presses.

State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

326 IAC 2-4.1 does not apply to modifications. This modification to the one (1) printing press, identified as Mark 16, is not considered a construction because no installation is included in this modification. Also, this modification to the one (1) printing press, identified as Mark 16, is not considered a reconstruction because the cost to increase capacity does not equal or exceed 50% of the cost to construct a new comparable press. It is a modification of an existing press, which existed prior to July 27, 1997.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The one (1) printing press, identified as Mark 16 is not subject to the requirements of 326 IAC 8-1-6 because it will limit VOC emissions to less than 25 tons per year.

326 IAC 8-5-5 (Graphic Arts Operations)

The one (1) printing press (identified as Mark 16) is not subject to the requirements of 326 IAC 8-5-5, because the one (1) printing press does not involve packaging rotogravure, publication rotogravure or flexographic printing.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Courier Kendallville, Inc. Kendallville, Indiana Permit Reviewer: NH/EVP

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification.

Changes Proposed

1. The source has modified the printing press identified as Mark 16. Potential VOC emissions will be greater than 25 tons per year. However, the source will limit VOC emissions from the printing press identified as Mark 16. Therefore, the old language in Condition D.1.2 has been deleted and new relevant language has been added.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification which would increase the potential to emit VOC from press Mark 16 to twenty-five (25) tons per year or more shall obtain prior approval from IDEM, OAM and shall be subject to the requirements of 326 IAC 8-1-6.

VOC input from the one (1) printing press, identified as Mark 16 shall be limited to less than 25 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6 not applicable.

- 2. Conditions D.1.8 and D.1.9 already contain record keeping and reporting conditions to show compliance with Condition D.1.2. The source will follow these same conditions to show compliance with the updated Condition D.1.2 language.
- 3. A new quarterly report form will be added to the permit in order to show compliance with Condition D.1.2.

Courier Kendallville, Inc. Kendallville, Indiana Permit Reviewer: NH/EVP

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

	1 20	or Quarterly Report	
Source Name: Source Address: Mailing Address: FESOP Minor Permi Facility: Parameter: Limit:	t Revision No.: 1 0 2 1 0 2 4 V	Courier Kendallville, Inc. 2500 Marion Drive, Kendallville, Inc. 2500 Marion Drive, Kendallville, Inc. 13-16834-00021 One (1) heat set web offset lithogras Mark 16 OC usage OC usage not to exceed 25 tons	N 46755 raphic printing press, identified
	Column 1	Column 2	Column 1 + Column 2
Month	VOC Usage This Month	VOC Usage Previous 11 Months	VOC Usage 12 Month Total
Month 1			
Month 2			
Month 3			
9	Deviation/s occur	urred in this quarter. rred in this quarter. en reported on:	
Title	/ Position: ature: e:		

Attach a signed certification to complete this report.

Page 7 of 7 First Minor Permit Revision 113-16834-00021

Courier Kendallville, Inc. Kendallville, Indiana Permit Reviewer: NH/EVP

Conclusion

This permit revision shall be subject to the conditions of the attached proposed **Minor Permit** Revision for a Federally Enforceable State Operating Permit No.: F113-16834-00021.

Appendix A: Emissions Calculations VOC From Printing Press Operations

Company Name: Courier Kendallville, Inc.

Address City IN Zip: 2500 Marion Drive, Kendallville, IN 46755

FESOP Minor Permit Revision: 113-16831
PIt ID: 113-00021

Plt ID: 113-00021 Reviewer: NH/EVP

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
Mark 16	1265	35.5	283241

INK VOCS					
Ink Name Press Id	Maximum Coverage '(lbs/MMin^2)	Weight % Volatiles	Flash Off %	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
Ink - Process Black	1.3	34.57%	60.00%	283241	38.19
Ink - Process Cyan	1.3	40.54%	60.00%	283241	44.78
Ink - Process Magenta	1.3	39.62%	60.00%	283241	43.77
Ink - Process Yellow	1.3	43.84%	60.00%	283241	48.43
Ink - Book Black	1.3	31.63%	60.00%	283241	34.94
Ink - PMS Blue	1.3	41.85%	60.00%	283241	46.23
Fountain Solution	0.15	76.90%	100.00%	283241	16.34
Cleaning Solvent (A-60 Odorless)	0.06	96.80%	50.00%	283241	4.11
Cleaning Solvent (Impact System)	0.06	2.00%	50.00%	283241	0.08
Cleaning Solvent (LPC)	0.06	92.40%	50.00%	283241	3.93
MISC	0.0001	75.00%	100.00%	283241	0.01

Total VOC Emissions =	68.89 Ton/vr

^{*}VOC (Tons/Year) = Maximum Coverage pounds per MMin*2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

solvent represent the maximum usage of all inks and all cleaning solvents.

METHODOLOGY

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%. (Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

Appendix A: Emissions Calculations HAPs From Printing Press Operation

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
First Minor Permit Revision: 113-16834

PIt ID: 113-00021 Reviewer: NH/EVP

UNCONTROLLED POTENTIAL HAP EMISSIONS

Material	Maximum Line Speed	Maximum Print Width	Maximum Coverage	Flash Off %	Weight % Xylene	Weight % Ethyl Benzene	Weight % Cumene	Weight % Glycol Ethers	Xylene Emissions	Ethyl Benzene Emissions	Cumene Emissions	Glycol Ether Emissions
	(feet/min)	(inches)	(lbs/MMin^2)		,	. ,			(ton/yr)	(ton/yr)	(tons/yr)	(tons/yr)
Mark 16												
Cleaning Solvent (A-60 Odorless	1265	35.5	0.06	50.00%	5.00%	1.00%	5.00%	0.00%	0.21	0.04	0.21	0.00
Cleaning Solvent (LPC)	1265	35.5	0.06	50.00%	0.00%	0.00%	0.00%	10.00%	0.00	0.00	0.00	0.42

Total State Uncontrolled Potential Emissions 0.21 0.04 0.21 0.42

> Total HAPs 0.89 tons/yr

METHODOLOGY

off (%) * weight % HAP) / 2000 (lbs/ton))